<u>IN THE CLAIMS</u>

Please cancel claim 1, 15-18 and 22, and amend claims 2, 5, 6, 10, 19 and 21, such that pending claims 2-14 and 19-21 read as follows:

1. (Canceled).

2. (Currently Amended) Encoding method according to claim [[1]] 6 wherein the method comprises:

partitioning said image into at least two zones of distinct natures, the nature of each zone being a function of at least one characteristic parameter of said mesh in said zone;

for each of said zones, assigning, at least as a function of said nature, of a type of wavelet enabling the optimizing of said encoding of said mesh of said zone.

3. (Original) Encoding method according to claim 2 wherein said characteristic parameter of said mesh takes account of the density of said mesh in said zone.

4. (Original) Encoding method according to claim 2 wherein said nature of said zone belongs to the group comprising:

at least one type of texture;

at least one type of contour;

at least one type of singularity;

at least one type of color; and

at least one type of shape.

5. (Currently Amended) Encoding method according to claim [[1]] 6 wherein said wavelet types belong to the group comprising:

Loop wavelets;

Butterfly wavelets;

Catmull-Clark wavelets; and

affine wavelets.

6. (Currently Amended) ~~Encoding method according to claim 1~~ <u>Method for encoding an image</u> <u>with which a hierarchical mesh is associated, implementing a wavelet-encoding of said mesh,</u> <u>wherein said encoding method implements at least two types of wavelets applied selectively to</u> <u>distinct zones of said image,</u> wherein the method comprises, for each of said zones, the application to said mesh, of coefficients of said type of wavelets assigned to said zone, taking account of a scalar value associated with said mesh at an updating point of said zone and said scalar value associated with said mesh at certain points at least, neighboring said updating point.

7. (Original) Encoding method according to claim 6, wherein said scalar value represents a parameter of said mesh belonging to the group comprising:

      the luminance of said mesh; and

      at least one chrominance component of said mesh.

8. (Original) Encoding method according to claim 6, wherein the method furthermore comprises encoding said wavelet coefficients implementing a technique belonging to the group comprising:

      a zero-tree type technique; and

      an EBCOT type technique.

9. (Original) Encoding method according to claim 6 wherein, with said image belonging to a sequence of successive images, said method furthermore comprises comparing said wavelet coefficients of said image with the wavelet coefficients of at least one image preceding or following said image in said sequence, so as to avoid the implementation of said encoding step for wavelet coefficients of said image identical to those of said preceding or following image.

10. (Currently Amended) ~~Encoding method according to claim 1~~ <u>Method for encoding an image</u> <u>with which a hierarchical mesh is associated, implementing a wavelet-encoding of said mesh,</u> <u>wherein said encoding method implements at least two types of wavelets applied selectively to</u> <u>distinct zones of said image,</u> wherein the method enables the encoding of a sequence of successive images, and said image is an error image, obtained by comparison of an original image of said

sequence and an image built by motion estimation/compensation, said image comprising at least one error region to be encoded and at least one of any existing substantially empty region.

11. (Original) Encoding method according to claim 10 wherein said partitioning step comprises detecting said error regions of said image by thresholding, making it possible to determine at least one region of said image having an error greater than a predetermined threshold.

12. (Original) Encoding method according to claim 11 wherein said partitioning step also comprises grouping together of at least certain of said detected error regions in parallelepiped-shaped blocks.

13. (Original) Encoding method according to claim 12 wherein said partitioning step comprises creating said zones of said image in the form of sets of blocks of a same nature.

14. (Original) Encoding method according to claim 11 wherein said partitioning step comprises creating said zones of said image from said detected error regions, implementing a quadtree type technique.

15. (Canceled).

16. (Canceled).

17. (Canceled).

18. (Canceled).

19. (Previously Presented) ~~Method according to claim 18,~~ Method comprising:

    generating a signal representing an image with which there is associated a wavelet-encoded hierarchical mesh, wherein at least two types of wavelets having been applied selectively to distinct zones of said image during encoding of the hierarchical mesh;

<u>and</u>

<u>transmitting said signal, wherein said signal conveys information on said type of wavelets</u>
<u>assigned to the encoding of the mesh of each of said zones,</u>

<u>and</u> further comprising:

structuring said signal in the form of packets each associated with one of said zones of
said image, each of said packets comprising the following fields:

a field indicating the start of a packet;

a field conveying an identifier of said packet;

an information header field;

a field comprising said pieces of information on said type of wavelets assigned to
said zone;

a field comprising wavelet coefficients applied to said mesh of said zone;

a field relating to the form of said mesh of said image;

a field indicating an end of a packet.

20. (Previously Presented) Method according to claim 19 wherein said information header field
comprises:

a sub-field on the number of wavelet coefficients of said zones;

a sub-field indicating said zone of said image, as a function of said form of said mesh; and

a sub-field on the number of bitmaps implemented for said wavelet coefficients.

21. (Currently Amended) Encoding method according to claim [[1]] <u>6</u> and further comprising
application of the method to at least one of the fields belonging to the group comprising:

video streaming;

video storage;

video conferencing;

video on demand; and

video mail.

22. (Canceled).